UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23280 7590 03/11/2009 Davidson, Davidson & Kappel, LLC 485 7th Avenue 14th Floor

New York NY 10018

EXAMINER

LE, HOA T

ART UNIT PAPER NUMBER

DATE MAILED: 03/11/2009

 APPELCATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKIET NO.
 CONFIRMATION NO.

 10/578/99
 05/11/2006
 Thomas Ruehle
 331.1120
 5128

TITLE OF INVENTION: PARTICLE COMPOSITE HAVING IRREGULAR SURFACE, METHOD FOR THE PRODUCTION AND USE THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/11/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	of transmitting the 1336 ig the Patent, advance of herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspondence a rate "FEE ADDR	ddress as ESS" for
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New York, NY	10018						(Deposi	itor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION	N NO.
10/578,999	05/11/2006	•	Thomas Ruchle	Ruchle		331.1120	5128	
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APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DU	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	06/11/20	09
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
LE, H	OA T	1794	428-403000					
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address for Change of Correspondence Address for PIOSB/122) authented. The Address form FIOSB/122) authented. The Address form for Correspondence Address form PIOSB/123 authented. The Address form form FIOSB/123 authented. Use of a Customer Number is required.			2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm thraving as a member a registered atterney or agent) and the names of up to 2 registered atterney or agent) and the names of up to 2 registered partner attorneys or agents. If no name is listed, no name will be printed.					
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE		THE PATENT (print or type data will appear on the part a substitute for filing an (B) RESIDENCE: (CITY inted on the patent):	atent. If an assigne assignment. and STATE OR C	OUNT		_	
4a. The following fee(s)			o. Payment of Fee(s): (Plea	se first reapply an	y prev	iously paid issue fee	shown above)	
Issue Fee	vo small entity discount p		A check is enclosed.	4 F PIPO 2028		-11		
Advance Order -			Payment by credit car The Director is hereby overpayment, to Depo	authorized to char sit Account Numbe	ge the i	required fee(s), any de (enclose a	ficiency, or credit n extra copy of thi	any s form).
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY statu		b. Applicant is no lon	ger claiming SMAI	LEN.	TTY status. See 37 Cl	₹R 1.27(g)(2).	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regis	stered a	ittorney or agent; or th	e assignee or othe	r party in
Authorized Signature				Date				
Typed or printed name				Registration No.				
This collection of inform an application. Confiden submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC it3-1450.	FR 1.311. The informatis U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any co- er, U.S. Patent and D THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includir s on the amount of til ark Office, U.S. Dep D TO: Commissioner	by the USPTO to g gathering, prepa ne you require to artment of Comme for Patents, P.O. F	process) uring, and complete erce, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,999	05/11/2006	Thomas Ruehle	331.1120 5128	
23280 75	90 03/11/2009		EXAM	UNER
Davidson, Davidson & Kappel, LLC		LE, HOA T		
485 7th Avenue	** .		ART UNIT	PAPER NUMBER
14th Floor New York, NY 10018			1794 DATE MAII ED: 03/11/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 290 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 290 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)			
10/578,999	RUEHLE ET AL.			
Examiner	Art Unit			
H (Holly) T Le	1794			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to amendment filed November 24, 2008,
- 2. The allowed claim(s) is/are 18-47.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - - 1. T Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No.
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 11/2008
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7.

 Examiner's Amendment/Comment
- -----
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other ___

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REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: None of the prior art references of record, singly or combined, teaches or suggests a composite particle comprising a carrier particle having an irregular surface of oxidic layer and a coating of particles having particle diameter of less than 1 micron on the oxidic layer. Irregular surface as defined in paragraph [0021] as being deviated "from the form of an ideal spherical surface or the ideal surface of another rotationally-symmetrical shape."

- Any comments considered necessary by applicant must be submitted no later
 than the payment of the issue fee and, to avoid processing delays, should preferably
 accompany the issue fee. Such submissions should be clearly labeled "Comments on
 Statement of Reasons for Allowance."
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. (Holly) T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 9:30-6:00 pm, Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. (Holly) T. Le/ Primary Examiner, Art Unit 1794

March 4, 2009